



STATE OF WASHINGTON

## STATE BUILDING CODE COUNCIL

### Washington State Energy Code Development Standard Energy Code Proposal Form

Jan 2022

Log No. 21-GP3-022

Code being amended: ☒ Commercial Provisions ☐ Residential Provisions

Code Section # C404.2.1

Brief Description:

*To remove EPCA preemption conflicts based on appliance energy source.*

Proposed code change text: (Copy the existing text from the Integrated Draft, linked above, and then use underline for new text and ~~strikeout~~ for text to be deleted.)

~~**C404.2.1 Service water heating system type.** Service hot water shall be provided by an electric air-source heat pump water heating (HPWH) system meeting the requirements of this section. Supplemental service water heating equipment is permitted to use electric resistance or fossil fuel in compliance with Section C404.2.1.4.~~

**EXCEPTIONS:**

- ~~1. 24 kW plus 0.1 watts per square foot of building area of electric resistance service water heating capacity is allowed per building.~~
- ~~2. Solar thermal, wastewater heat recovery, other approved waste heat recovery, ground source heat pumps, water-source heat pump systems utilizing waste heat, and combinations thereof, are permitted to offset all or any portion of the required HPWH capacity where such systems comply with this code and the Uniform Plumbing Code.~~
- ~~3. Systems that comply with the Northwest Energy Efficiency Alliance (NEEA) Commercial Electric Advanced Water Heating Specification.~~
- ~~4. Service hot water systems served by a district energy system that serves multiple buildings and that was in service before the effective date of this code.~~
- ~~5. Commercial dishwashers, commercial food service equipment, and other approved process equipment are permitted to utilize electric booster heaters for supply water temperatures 120°F (49°C) or higher.~~
- ~~6. Systems connected to a low-carbon district energy exchange system or a low-carbon district heating and cooling or heating only system.~~
- ~~7. Essential facilities. Groups I-2 and I-3 occupancies that by regulation are required to have in place redundant emergency backup systems.~~

Purpose of code change:

*Current Code Section (404.2.1) excludes EPCA covered appliances that use gas-fired and electric resistance for water heating.*

Your amendment must meet one of the following criteria. Select at least one:

- |   |  |
|---|--|
| <input type="checkbox"/> Addresses a critical life/safety need.   | <input checked="" type="checkbox"/> Consistency with state or federal regulations. |
| <input type="checkbox"/> The amendment clarifies the intent or application of the code.                                     | <input type="checkbox"/> Addresses a unique character of the state.                |
| <input type="checkbox"/> Addresses a specific state policy or statute.<br>(Note that energy conservation is a state policy) | <input type="checkbox"/> Corrects errors and omissions.                            |

Check the building types that would be impacted by your code change:

- |  |   |
|--|---|
| <input type="checkbox"/> Single family/duplex/townhome         | <input checked="" type="checkbox"/> Commercial / Retail |
| <input checked="" type="checkbox"/> Multi-family 1 – 3 stories | <input checked="" type="checkbox"/> Institutional       |
| <input checked="" type="checkbox"/> Multi-family 4 + stories   | <input type="checkbox"/> Industrial                     |

Your name            Ian Casey

Email address        ian.casey@nwnatural.com

Your organization    NW Natural

Phone number        (971) 979-6381

Other contact name   Kevin Duell

## **Economic Impact Data Sheet**

**Is there an economic impact:** ☒ Yes ☐ No

Briefly summarize your proposal's primary economic impacts and benefits to building owners, tenants, and businesses. If you answered "No" above, explain your reasoning.

*Provides more appliance choices for designers and builders to select equipment that best fits the needs of the specific building type and use to provide a more affordable installation cost and long-term operational costs.*

Provide your best estimate of the **construction cost** (or cost savings) of your code change proposal? (See OFM Life Cycle Cost [Analysis tool](#) and [Instructions](#); use these [Inputs](#). **Webinars on the tool can be found [Here](#) and [Here](#)**)

\$[Click here to enter text.](#)/square foot (For residential projects, also provide \$[Click here to enter text.](#)/ dwelling unit)

Show calculations here, and list sources for costs/savings, or attach backup data pages

*Costs will vary widely depending on the application. There is insufficient time to generate these calculations.*

Provide your best estimate of the **annual energy savings** (or additional energy use) for your code change proposal?

[Click here to enter text.](#)KWH/ square foot (or) [Click here to enter text.](#)KBTU/ square foot

(For residential projects, also provide [Click here to enter text.](#)KWH/KBTU / dwelling unit)

Show calculations here, and list sources for energy savings estimates, or attach backup data pages

*Given requirements for Additional Energy Credits, energy savings should be similar to the 2021 WSEC-C.*

List any **code enforcement** time for additional plan review or inspections that your proposal will require, in hours per permit application:

***Small Business Impact.*** Describe economic impacts to small businesses:

*This should reduce economic impacts to small businesses.*

***Housing Affordability.*** Describe economic impacts on housing affordability:

*This should reduce economic impacts on housing affordability.*

***Other.*** Describe other qualitative cost and benefits to owners, to occupants, to the public, to the environment, and to other stakeholders that have not yet been discussed: